

**DRAFT DOCUMENT**

Purpose of this proposal:

- To propose a simple, accessible program for farms of all sizes
- To identify existing NRCS resources that could be built upon to create a state-supplemented PES/CSP+ program
- To emphasize the need for holistic planning
- To equitably value historically underserved and beginning farmers
- To identify outstanding questions/decision points for the working group to decide upon
- To identify future opportunities for farmer input
- To propose potential funding sources

## **1. Introduction/Overview**

We appreciate the opportunity to offer this proposed model for Payment for Ecosystem Services in Vermont as a public comment to the Soil Health and Payment for Ecosystem Services Working Group and the Vermont Climate Council's Agriculture and Ecosystems Subcommittee. As a group of primarily small farmers and service providers, we, the undersigned, are committed to being inclusive of all types of farmers and land stewards representing agriculture in this state. Our goal is that through good communication and collaboration among stakeholders, we propose the following as an equitable approach to putting value on ecosystem services such as soil health, water quality, biodiversity, and carbon sequestration.

Historically, farmers have only been paid on commodities they produce, independent of the negative or positive environmental impacts of their practices. Consequently, this has led to widespread degradation of our soils and waterways as well as worsening loss of biodiversity. The purpose of our proposal is to develop a framework for a simple, accessible program for farms of all sizes, which emphasizes an ensured basic income, whole-farm viability, flexibility to accommodate farmer autonomy and ingenuity, and sustainability.

This proposed program incentivizes “practices” as well as “outcomes”, and guarantees base income for adoption of Healthy Soils Management Systems. “Outcomes” are important measures of particular types of impact, but often are reductionistic in focus (valuing one outcome to the exclusion of others), have somewhat disputed metrics, and fail to capture the holistic impacts of particular practices and types of farms. There is also the challenge of determining baselines and factoring in additionality in an exclusively outcome based model. At the same time, “practices” look different on farms based on management, soil type, microclimate, etc. and it is difficult to monitor how successfully each farm is implementing a practice. Utilizing the CSP Bundles and emphasizing holistic planning as described below will bridge the gap between these approaches and will allow for the case-specific, on the ground flexibility that is required in all farming systems.

This proposal makes an attempt to provide financial services to farmers and land stewards that maintain, excel in, and show exemplary efforts in improving our soil, water and land. Our goal is to provide the flexibility and economic incentive to allow farmers to make the most

environmentally sound decisions while also making sound business decisions. With a focus on holistic planning, this program is designed to engage farmers in the conservation planning process, and reduce prohibitive barriers to accessing planning resources and associated programmatic funding.

While the Conservation Stewardship Program (CSP) has been a popular program within the USDA of late, not all Vermont farmers qualify for the program. This proposal outlines a CSP Plus (CSP+) program, which would allow us to reach many more farms throughout the state. The existing Vermont Environmental Stewardship Program (VESP) could be easily altered to align with and house the CSP+ program detailed below.

Please review this proposal as a starting point to a very complex issue that will require creativity, cooperation, and collaboration between government agencies, conservation organizations, and farmers and land stewards alike.

### **CSP+/VESP/PES**

We suggest a pilot program which provides a flat, base annual payment to all farms within the program, with the opportunity for farmers to receive additional payments on a per-acre basis, reflecting varying degrees of sustainable land management. This program is designed to complement CSP and would open up opportunities for more farms to enroll in the planning process leading to a successful CSP application, as well as to provide an accessible alternative for farms which do not qualify for CSP. Following is a brief outline of the proposed program:

- a. All farms which both a) comply with RAPS and b) apply and are accepted to the program will receive a base payment of \$10,000. Ongoing base payments can be achieved with reapplication as tier goals are met.
- b. Additionally, farmers receive funding on a per acre basis to engage in different levels of land stewardship
  - i. Base--farms comply with RAPs and BMP's and receive no additional payments under this program before achieving subsequent tiers
  - ii. Steward--farmers are paid \$10/acre to implement basic conservation practices
  - iii. Soil Builder--farmers are paid \$60/acre for measured soil health improvements which meet a certain threshold
  - iv. Regenerative--farmers are paid \$90/acre for implementing whole-farm regenerative management

Categories		Examples of Suggested Threshold Requirements	CSP	Benefits
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**DRAFT 1** Proposal for PES in Vermont  
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June 2021

	Pay Bracket		Equivalent	
Base	\$10,000 (Flat Rate for all farms)	No RAP violations and meet basic BMP's for farm size.  *involvement in the program requires farms to work with technical service providers to develop comprehensive conservation, business, and/or succession plans	Existing Activity Payment (minimum \$1,500)	Incentivize change, transition costs, infrastructure. Full base payment comes at the start of the contract.  Option to form Farm Management Team <sup>1</sup>
Steward	\$10/acre	Base plus...crop rotation, manure injection, intensive grazing and cover cropping.  +Initiated Planning Process	Enhanced Activity Payment	Controlling nutrient runoff, decreased fertilizer cost, meeting regulations, cleaner water coming off farm
Soil Builder	\$60/acre	Base and Steward plus... comprehensive planning, enhanced soil characteristics such as multiple soil biological species, advanced root mass, obvious glue and nutrients in optimal range.  +Completed Plan +CSP Application	<a href="#">Bundles</a> +Comprehensive Conservation Plan	Building organic matter, building soil systems, increased soil diversity, better feed quality, retaining carbon, less wind erosion, improved water retention
Regenerative	\$90/acre	Base, Steward and Soil Builder plus... trees per acre, wild native plants, hedge rows, carbon levels in soil, water infiltration, biodiversity.  +Implemented Plan	Bundles +Supplemental Payment	Strong soil systems in place, removing legacy carbon out of atmosphere, hosting multiple animal and soil species, generating soil resiliency, improving air quality, massive water retention, minimum farmer inputs and repair. Smaller farms may have an easier time reaching this tier.  Long term: Once this stage is achieved farms may continue to apply for the per acre payments, ongoing. Base payments?

**Example: 20 Acre Farm**

<sup>1</sup> See [NRCD Farm Teams](#) and [UVM Farm Management Teams](#)

3 year contract - meets all requirements at all levels

Levels	Rate	Payment	Payment	Payment
Base Pay	1x	\$10,000	\$10,000	\$10,000
Steward	20 x \$10/acre x3	\$600		
Soil Builder	20 x \$60/acre x3		\$3,600	
Regenerative	20 x \$90/acre x3			\$5,400
Total Payment Received after meeting requirements		\$10,600	\$13,600	\$15,400

#### **Example: 100 Acre Farm**

3 year contract - meets all requirements at all levels

Levels	Rate	Payment	Payment	Payment
Base Pay	1x	\$10,000	\$10,000	\$10,000
Steward	100 x \$10/acre	\$1,000		
Soil Builder	100 x \$60/acre		\$6,000	
Regenerative	100 x \$90/acre			\$9,000
Total Payment Received after meeting requirements		\$11,000	\$16,000	\$19,000

#### **ADD CSP PAYMENT EXAMPLE CHART**

## **2. Conservation Stewardship Program (CSP) Overview**

We believe that by coordinating between local, state, and federal entities we can strategically target the use of existing programs as a foundation for this program, and the focus of our plan is to increase accessibility of existing programs while providing additional payments to incentivize goals not identified in existing programs. For example, qualification for this program would not be framed by which resource concerns are being addressed, as is currently the case; instead, programming would be based on improving collective statewide ecosystem goals. As a first step, we suggest a comprehensive review of existing NRCS resources in creating a state-supplemented PES/CSP+ program, as well as identifying CSP shortfalls that could be remedied. We also recommend identifying localized authority to reframe the financial incentive approach focused on resource concerns to one that promotes desired outcomes.

One element of the CSP program that we think aligns with the general objectives of PES discussion in Vermont are the [CSP bundles](#), particularly those catered to Grazing Management and Cropland Soil Health. CSP bundles reward farmers for implementing a selected ‘bundle’ of practices which work synergistically to provide benefits which exceed what would be expected if each of the practices were implemented individually. Each CSP bundle has three or more required enhancements, and for some bundles, the applicant has the option to pick additional items enhancements for ‘supplemental payments’ (i.e. Advanced Grazing Management). By requiring that a group of practices be implemented which pertain to different aspects of management according to land use, the CSP bundles also promote holistic management systems which are not catered to one resource concern at the expense of another. Additionally, relevant to providing equitable compensation for farms which have already been practicing good land stewardship, CSP takes the approach of allowing farmers who have already implemented practices included in the bundle to be eligible for payments so long as more than 50% of the component practices are newly adopted.

### **CSP Shortfalls**

Our proposal envisions using CSP bundles as a model to provide farmers choices and flexibility to fit their management preferences. Bundles are a selected group of farming practices that aid in the improvement of our air, water, and soil. There are multiple bundles to best match the farming techniques a farm is most comfortable with. However, there are many areas such as implementing composting, agroforestry, and holistic grazing management, where these bundles will fall short of the goals of a PES system. We propose that a new state program would be developed to correct these shortcomings:

- a. No base payment: The base payment in our proposal is a key step for incentivizing involvement and for helping the program to better support farmers financially. However, its benefits are inversely proportional to the size of the business and is therefore also intended to provide more favorable support for small farms. While CSP establishes a minimum annual activity payment of \$1,500 regardless of size, CSP does not offer a “base payment” for being in compliance with the RAPs, for instance. This base payment model will need to be supported by a new program.
- b. Qualifying farms: Current federal programs grant funds through a ranking system based on prioritized resource concerns. The total number of farms which can be included in the program is determined by the extent of allocated federal funds. This means that some farms will not be funded, either because the resource concerns, land uses, size, or location of their land are of low priority or because their current management already successfully implements BMPs (over the 50% threshold noted above). It is important to note that in Vermont, CSP is an undersubscribed program and, to date, 100% of eligible applicants have been approved under this program. A barrier to accessing CSP for some farms is the significant financial investment necessary to achieve minimum acceptable levels of stewardship across all land uses. To achieve our objectives for equitable inclusion and for incentivizing proactive (rather than reactive) action, a new state program should prioritize funding for equivalent implementation of CSP bundles on farms that do not qualify for CSP.
- c. CSP Ceiling: CSP incentivizes a certain degree of land stewardship, and pays only for practices, not for outcomes. We believe that our environmental and agriculture crises require greater action and suggest that a new program provide funding for farms whose management goes beyond CSP, as laid out in our program framework above. Furthermore, as farms implement increased conservation measures through the different stages of the program, we

suggest transitioning to an outcome based payment method as detailed in the third and fourth tier of our program framework.

- d. Transitional Funding Resources: CSP provides payments for farms to implement practices, but does not include any measures to help farms manage investments for management transition, production loss, or new infrastructure. We suggest that a new program addresses these issues through the upfront base payments as well as facilitating application to existing programs through dedicated technical assistance (i.e. Farm Management/Transition Teams).
- e. Historically Underserved Farmers: CSP does not provide measures to specifically support historically underserved farmers; we suggest that a new program does so. Additionally, out of concern for the future conservation of farmland and to support drawing new farmers, especially historically underserved<sup>2</sup> (HU) producers, into the agriculture sector, we suggest increased payment rates be made available to farmers who choose to put their farm into a 'beginner farmer reserve program'. This program will allow an HU farmer to bid on a farm before it gets put onto the open market. Attrition in Vermont is on the rise due to an aging farming community, but the succession plans for many farms is to sell out to an existing farm. This makes it difficult for most new farmers to compete with an existing farm that has the advantage of established credit and financial resources. New farms and farmers are shown to be very positive for the economic health of our local communities and for our farming industry. This program will allow HU farmers to bid or negotiate on a farm before it gets put onto the open market, giving valuable time for funding and logistics to be achieved, as well as giving the selling farmer financial incentive of generating more revenue during the life of his contract.
- f. Comprehensive Planning: To ensure that the program results in supporting a holistic agriculture economy, we suggest that involvement in the program requires farms to work with technical service providers to develop comprehensive conservation, alternative management plans (such as Holistic Management, Scale of Permanence and others), business, and/or succession plans. The 2018 Farm Bill includes a new activity for producers to develop a Comprehensive Conservation Plan (CCP) as part of a CSP contract. These plans are meant to exceed the stewardship threshold for each priority resource concern identified by NRCS across all land uses included in a farming operation. **We suggest emphasis on CCP development in any PES program developed for Vermont.** Funding considerations should include significant allocations for Certified Conservation Planners, Farm Management/Transition Teams, and Farm Viability Planners to ensure creation of such plans is accessible to any interested farm.

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<sup>2</sup> socially disadvantaged, beginning, limited resource, and veteran farmers and ranchers



### Example CSP Bundles

<div style="background-color: #00728f; color: white; padding: 5px; text-align: center;"> <small>United States Department of Agriculture</small> </div> <p><b>CROPLAND ENHANCEMENT BUNDLE</b></p> <p><b>B000CPL24</b></p> <p><b>CONSERVATION STEWARDSHIP PROGRAM</b></p> <p><u>Crop Bundle #24 – Cropland Soil Health Management System</u></p> <p>Conservation Practices 590: Nutrient Management; 328: Conservation Crop Rotation; 329: Residue and Tillage Management, No-Till; and 340: Cover Crop</p> <p>APPLICABLE LAND USE: Crop (annual &amp; mixed)</p> <p>RESOURCE CONCERN ADDRESSED: Water Quality Degradation, Soil Quality, Soil Erosion, Soil Compaction or Plant Pest Pressure</p> <p>BUNDLE LIFE SPAN: 1 year</p>	<div style="background-color: #00728f; color: white; padding: 5px; text-align: center;"> <small>United States Department of Agriculture</small> </div> <p><b>PASTURE ENHANCEMENT BUNDLE</b></p> <p><b>B000PST5</b></p> <p><b>CONSERVATION STEWARDSHIP PROGRAM</b></p> <p><u>Pasture Bundle #5 – Pasture</u></p> <p>Conservation Practices 528: Prescribed Grazing; 315: Herbaceous Weed Control and 645: Upland Wildlife Habitat Management</p> <p>APPLICABLE LAND USE: Pasture</p> <p>RESOURCE CONCERN ADDRESSED: Soil, Plant &amp; Animal</p> <p>BUNDLE LIFE SPAN: 1 year</p>
<div style="background-color: #00728f; color: white; padding: 5px; text-align: center;"> <small>United States Department of Agriculture</small> </div> <p><b>CROPLAND ENHANCEMENT BUNDLE</b></p> <p><b>B000CPL19</b></p> <p><b>CONSERVATION STEWARDSHIP PROGRAM</b></p> <p><u>Crop Bundle #19 – Soil Health Precision Ag</u></p> <p>Conservation Practices 590: Nutrient Management; 595: Integrated Pest Management, 328: Conservation Crop Rotation, 329: Residue and Tillage Management, No-Till, 327: Conservation Cover or 420: Wildlife Habitat Planting, and 345: Residue and Tillage Management, Reduced Till</p> <p>APPLICABLE LAND USE: Crop (annual &amp; mixed)</p> <p>RESOURCE CONCERN ADDRESSED: Soil, Water &amp; Animal</p> <p>BUNDLE LIFE SPAN: 1 year</p>	<div style="background-color: #00728f; color: white; padding: 5px; text-align: center;"> <small>United States Department of Agriculture</small> </div> <p><b>Advanced Grazing Management Supplemental Payment</b></p> <p><b>CONSERVATION STEWARDSHIP PROGRAM</b></p> <p><u>Supplemental Payment – Advanced Grazing Management</u></p> <p>Conservation Practices: 528: Prescribed Grazing; 314: Brush Management; 315: Herbaceous Weed Control; 338: Prescribed Burning; 382: Fence; 472: Access Control; 511: Forage Harvest Management; 590: Nutrient Management; 595: Integrated Pest Management and 645: Upland Wildlife Habitat Management</p> <p>APPLICABLE LAND USE: Pasture &amp; Range</p> <p>RESOURCE CONCERN ADDRESSED: Soil, Water, Animals, Plants &amp; Air</p> <p>LIFE SPAN: Dependent upon Component Enhancement</p>

1. **B000CPL24 Crop Bundle #24 – Cropland Soil Health Management System**  
(Nutrient Management; Conservation Crop Rotation; Residue and Tillage Management, No-till; Cover Crop)
2. **B000CPL19 Crop Bundle #19 - Soil Health Precision Ag**  
(Nutrient Management; Integrated Pest Management; Conservation Crop Rotation; Residue and Tillage Management, No-Till; Conservation Cover; Wildlife Habitat Planting; Residue and Tillage Management; Reduced Till)
3. **B000PST5 Pasture Bundle #5**  
(Prescribed Grazing; Herbaceous Weed Control; Upland Wildlife Habitat Management)
4. **B000BFF1 - Buffer Bundle #1**  
(Filter Strip; Conservation Cover; Wildlife Habitat Planting; Tree/Shrub Establishment)
5. **B000GRZ1 Grazing Bundle #1 - Range and Pasture**  
(Prescribed Grazing; Herbaceous Weed Treatment; Upland Wildlife Habitat Management)
6. **B000GRZ2 Grazing Bundle #2 - Range and Pasture**  
(Access Control; Fence; Streambank and Shoreline Protection)

7. **B000GRZ3 Grazing Bundle #3 - Range and Pasture**  
(Access Control; Riparian Herbaceous Cover; Streambank and Shoreline Protection)
8. **B000GRZ4 Grazing Bundle #4 - Range and Pasture**  
(Access Control; Riparian Forest Buffer; Streambank and Shoreline Protection)
9. **B000GRZ5 Grazing Bundle #5 - Range and Pasture**  
(Prescribed Grazing; Herbaceous Weed Control; Upland Wildlife Habitat Management)
10. **B000FST1 Forest Bundle #1**  
(Forest Stand Improvement, Tree/Shrub Establishment)
11. **AGM Advanced Grazing Management Supplemental Payment**  
(Prescribed Grazing; Brush Management; Herbaceous Weed Control; Prescribed Burning; Fence; Access Control; Forage Harvest Management; Nutrient Management; Integrated Pest Management; Upland Wildlife Habitat Management)

### 3. Open Questions for Farmers

We do not intend for this proposal to be a final product, nor do we intend for it to provide answers for all questions. Many of the broader questions being discussed are not addressed in this proposal, and the solutions will be more appropriately determined by the experts involved in the Vermont PES and Soil Health Working Group. However, we do want to draw attention to the vast wealth of knowledge inherent in Vermont's farming community and technical assistance providers; going forward, we suggest identifying future opportunities for farmer input and input from field staff. Key questions which should be posed to farmers, both now and as the program develops, are: Which practices are included in the bundles? What practices are emphasized for supplemental payments? What are the obstacles and potential solutions for increasing flexibility in programming? How can administration be more accessible or efficient? What are some additional CSP shortfalls? Where do farmers feel limited? What up-front base funding is needed? What practices are useful but not included in CSP?

### 4. Technical Assistance (TA) Providers

This proposed plan will involve extensive reliance on technical service providers, including Conservation Planners, Farm Viability Specialists, Grazing Specialists, and Farm Team Facilitators. We suggest using a Farm Management Team<sup>3</sup> approach to assist farms through the process, while distributing workload among agricultural staff. Enrolled farms would have the option of forming a Farm Management Team as part of the program. Adequate funding for TA should be included in allocation for this program.

### 5. Funding

As has been commonly noted, a key consideration for a new program will be its funding source. Some possible sources include:

- Replacing some state programs
- Application through a large federal grant (RCPP, CIG)
- A funding strategy such as that outlined by the Soil Health Investment Trust

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<sup>3</sup> See [NRCD Farm Teams](#) and [UVM Farm Management Teams](#)



- Compensation through tax breaks, rather than direct payments
- Being additive to existing federal programs like CSP or the new CIC
- Reallocation of existing taxes (i.e. Meals/Rooms Tax, Property Transfer Tax)
- Current Use overlaps
- Farm insurance (use to invest in soil infrastructure)
- FEMA flood planning  
<https://www.fema.gov/floodplain-management/community-rating-system>
- Model after corn funding program

Furthermore, we do not suggest creating a program that compensates farmers through sale of service credits on a trading market, due to the very low per acre payment rate as well as the ecological false flag of offsetting pollution from other sources.

## **6. Connection to Carbon Reduction**

An important outcome of this program will be increased carbon storage in soils. This program aims to incentivize farms to transition towards conservation-oriented management strategies and to support the goals stated in Vermont's [Global Warming Solutions Act](#).

Agro-ecosystems are complex and Conservation Plans must be tailored to each specific farm setting, but a targeted plan designed for a farm's unique landscape can result in positive carbon storage outcomes (see [here](#) for information about the applicability of some practices for different soils and climate conditions, as well as some discussion about the trade-offs of some conservation practices and the impacts on yields, etc.). For example, surface soil carbon can be 11-22% greater on farmland that includes cover crops in its management compared to farmland that does not ([see here](#)). Other practices that can be included in Conservation Plans to increase soil carbon include management-intensive grazing and conversion of cropland to pasture. (Additionally, a list of various other practices and their contribution to climate mitigation is described in Table 1 of [this article](#).)

Furthermore, conservation practices can also help establish a food system that is more resilient and adaptable to a changing climate, which speaks directly to the Vermont Climate Council's [Agriculture and Ecosystem Committee's charge](#) to "focus on the role Vermont's natural and working lands play in carbon sequestration and storage, climate adaptation, and ecosystem and community resilience" (10 V.S.A. § 591(c)(4)). A robust localized food system will reduce transportation emissions. Employing the Soil Health Principles (<https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/nd/soils/health/?cid=nrcseprd1300631>) and practices on farmland and public lands to improve soil structure such as integrating animals, rotational grazing, minimized tillage, planting cover crops, trees and the proliferation of deep-rooted perennial species to improve soil structure can help to infiltrate more rainwater, retain moisture during increasingly-frequent periods of drought and reduce soil erosion caused by high-volume rain events. Taking precautions now is critical as flooding, erosion, drought and the potential for wildfires will all become more prevalent as climate change continues to advance.

**ENDORSEMENTS**

*If you like this draft, please add your name and organization or farm below. Thanks! We'll send the proposal in draft form to the Payment for Ecosystem Services and Soil Health Working Group early next week.*

Signed,

Cat Buxton, Vermont Healthy Soils Coalition

Jennifer Byrne, White River NRCD

Guy Choiniere, Choiniere Family Farm

Stephen Leslie, Cedar Mountain FarmVM